

CLAIMS

I Claim:

5 1. A frame joiner press system, comprising:

a base;

a plurality of support shafts extending upwardly from said base;

10 a support platform having a platform slot, wherein said support platform is slidably positioned upon said support shafts, and wherein said support platform is capable of receiving a first member and a second member to be joined together with V-nails;

at least one retaining structure connected to said base below said platform slot for retaining one or more V-nails; and

15 a leverage structure for selectively applying a downward force upon a first member and a second member.

20 2. The frame joiner press system of Claim 1, wherein said retaining structure is comprised of a plurality of retaining pins depressibly positioned within a support housing for receiving a V-nail.

25 3. The frame joiner press system of Claim 2, wherein said retaining pins are springably positioned within said support housing.

4. The frame joiner press system of Claim 3, wherein said plurality of retaining pins are comprised of three retaining pins forming a straight pattern.

5. The frame joiner press system of Claim 1, including a plurality of springs positioned between said base and said support platform.

5 6. The frame joiner press system of Claim 5, wherein said springs are each positioned about a respective support shaft.

10 7. The frame joiner press system of Claim 1, including a plurality of guide tubes attached to said support platform and slidably positioned about said support shafts.

15 8. The frame joiner press system of Claim 1, including a pair of guide members forming a V-shaped structure for positioning a first member and a second member adjacent thereto.

20 9. The frame joiner press system of Claim 8, including a locking member movably positioned upon said support platform for selectively locking a first member and a second member between said locking member and said guide members.

25 10. The frame joiner press system of Claim 9, wherein said locking member has an engaging edge.

11. The frame joiner press system of Claim 10, wherein said engaging edge has a first angled portion, a front straight portion and a second angled portion opposite of said first angled portion.

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12. The frame joiner press system of Claim 1, wherein said at least one retaining structure is comprised of at least two retaining structures for supporting two or more V-nails.

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13. The frame joiner press system of Claim 1, wherein said leverage structure is comprised of an upper member attached to an upper portion of said support shafts, a main tube within said upper member, a drive shaft slidably positioned within said main tube, a lever arm pivotally attached to said main tube and mechanically connected to said drive shaft, and an engaging member attached to a lower end of said drive shaft for engaging a first member and a second member.

14. The frame joiner press system of Claim 13, wherein said main tube is vertically adjustable within said upper member.

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15. The frame joiner press system of Claim 13, wherein said main tube is horizontally adjustable within said upper member.

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16. The frame joiner press system of Claim 13, including a resilient lower portion attached to a bottom surface of said engaging member.

17. A V-nail retainer system for a frame joiner press for retaining one or more V-nails, comprising:

a housing having an upper surface; and

5 a plurality of retaining pins depressibly positioned within said housing for receiving at least one V-nail.

18. The frame joiner press system of Claim 17, wherein said retaining pins are
10 springably positioned within said support housing.

19. The frame joiner press system of Claim 18, wherein said plurality of retaining pins are comprised of three retaining pins forming a straight pattern.
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20. The frame joiner press system of Claim 17, wherein said plurality of retaining pins are comprised of three retaining pins forming a straight pattern.